

Competency- Based CURRICULUM

Pre-service Training For

MEDICAL LABORATORY TECHNICIANS (MLTs)

Republic of Liberia



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REBUILDING BASIC HEALTH SERVICES IN LIBERIA

Curriculum Strengthening Process-Medical Laboratory Technicians (MLTs)

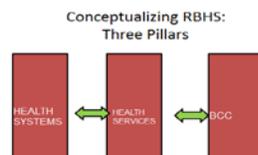
BACKGROUND

Five years after emerging from prolonged and devastating civil wars, Liberia is beginning to make some degree of measurable progress on a range of economic and social outcomes. The impact of the conflicts on the health sector were as severe as on any other and included loss of staff, destruction of infrastructure, disruption of health programs, lack of resources and resultant increased dependence on international donors.

The Ministry of Health and Social Welfare (MOHSW) has emerged as one of the strongest and most effective government entities, demonstrating strong leadership and vision, developed a sound National Health Policy and Plan, collaborated effectively with its partners and is taking the lead on setting national policies, strategies, and plans. The cornerstone of the Liberian National Health Plan is the MOHSW's Essential Package of Health Services (EPHS), which outlines the essential services to be provided at each level of the health system.

Early indications suggest that there have already been improvements in some important health outcomes. Infant and child mortality have reduced considerably since earlier in the decade and now compare favorably with regional rates. However, the maternal mortality ratio, which remains elevated at a troubling level and is still one of the highest in the world.

The Rebuilding Basic Health Services (RBHS) project, A Joint collaboration between USAID and the Ministry of Health and Social Welfare, is the United States government's major initiative in support of the MOHSW. Funded by USAID, RBHS is a partnership among JSI Research and Training, Jhpiego, the Johns Hopkins University Center for Communication Programs (JHU CCP), Management Sciences for Health (MSH), and Six NGOs partner: Africare, EQUIP, IRC, MERCI, MTI, PSI. Implementation of RBHS is over a 5-year (2008-2013) period and is guided by a three-pronged strategic approach:



- Strengthening and extending **service delivery** through performance-based grants to non-governmental organization (NGO) partners (IRs 1 and 3);
- Strengthening Liberia's **health system** in the areas of human resource management, infrastructure, policy development, and monitoring and evaluation (IR 2); and
- Preventing disease and promoting more healthful behaviors through **behavior change communication** and community mobilization (IRs 1,2 and 3).

In addition, the RBHS project has specific responsibilities in the areas of maternal and child health, family planning/reproductive health, malaria, HIV, TB, community level activities and water and sanitation

Curriculum: Medical Lab Technician, Liberia, September, 2011

First Printing: Corrections and comments will be accepted for second printing

Pre-service Strengthening Initiative/RBHS

Jhpiego was brought on as a key implementing partner to lead the Pre-service Strengthening Initiative by JSI, the prime contractor, in sharing technical expertise in reducing maternal and neonatal morbidity and mortality through evidence-based best practices and to do so primarily by strengthening 2 educational institutions, TNIMA and EBSNM, focusing on Registered Nurses (RNs), Certified Midwives (CMs), Physicians Assistants (PAs) and Environmental Health Technicians (EHTs), so that the long term capacity of Liberia to deliver qualified professionals will affect the exceedingly high rates of maternal and neonatal morbidity and mortality. These two institutions provide educational programs for Certified Midwives and in addition TNIMA provides educational programs for other cadres including, PAs, RNs, MLTs and EHTs. After the first year of implementation, the MOHSW through Dr. Bernice Dahn, Deputy Minister/CMO requested RBHS to add revision of the curriculum for training Medical Laboratory Technicians (MLTs) developed by TNIMA through an independent consultation.

The Pre-service Strengthening Initiative aims to improve, the pre-service training of direct entry mid-level health care Providers; the teaching skills of instructors and clinical preceptors, the educational environment at learning institutions & Clinical sites (health facilities) and the overall management of these institutions. Standard Based Management and Recognition (SBMR), a quality performance improvement process developed and being use by Jhpiego was initiated. Major activities included Effective Teaching Skills training, Technical updates, follow-up, mentoring and monitoring for faculty and clinical preceptors; developing and equipping the computer and science labs; simulation center/skills lab and library; revising and harmonizing the various curricula, updating and making them appropriate for present realities in Liberia.

Curriculum Strengthening/Revision

In revising the curriculum for training students to become MLTs, all stakeholders and experts, involve in laboratory training, service and regulation, including those in the Education and Training National Working Group and others, including the Clinton Health Access Initiative (CHAI) and the National Diagnostic Unit/MOHSW, participated in a four step inclusive process to develop this competency-based curriculum for training MLTs as follows:

1. **Updating the job description and developing core competency for MLTs:** The stakeholders and experts, considering the present functions and responsibilities of MLTs in Liberia and utilizing relevant and appropriate documents and resources materials, went through the process of identifying tasks in revising and updating the available job description of the MLT.

Like the process for updating the job description, developing the core competencies for MLTs, was through a participatory process of identified knowledge, skills and attitudes outlined in necessary competencies, that each MLT needs in order to perform all task efficiently for quality provision of services.

2. Curriculum Validation Process:

A new curriculum for training MLTs at TNIMA had been developed through an independent consultation by TNIMA led by Mrs. Eva Mae Caulker, the Lab Coordinator at JFKMC. The objective of this process was to confirm the adequacy of this curriculum for meeting training needs of MLTs in Liberia. This curriculum was thoroughly reviewed, discussed compared and contrasted to similar MLTs curricula in Liberia and other countries, especially from Ethiopia and Malawi.

A course listing and sequencing was later adapted outlining courses required for a three year program (six semesters), for training MLTs in Liberia to acquire the necessary core competencies that had been previously developed in collaboration with RBHS.

3. Development of syllabi of Courses:

Individual course syllabus was developed by content experts including faculty from the various MLTs training Schools in the country and members of the Lab Technical Working Group. Each course syllabus in the curriculum was reviewed. Comments/changes, including additions were discussed and were agreed upon for inclusion.

It was agreed that the curriculum would be used by all MLT training programs and schools in Liberia as minimum requirement and not only by TNIMA, since it was developed by all in a very participatory and inclusive process.

4. Finalization of the curriculum

All the comments were incorporated into each course syllabus and the entire curriculum final draft was circulated to all stakeholders and Lab experts, including those not present during the process. The curriculum was again circulated to all stakeholders and Dr. Mertens based on a request from TNIMA, led TNIMA faculty in a process of final review. These and others comments received have been incorporated into this final curriculum.

Admission Criteria for Entry into the Medical Lab Technicians (MLT) Program in Liberia

Candidates for the EHT Program must:

- Be a high school graduate with a West African Examination Council (WAEC) certificate
- Pass Biology, Chemistry and Physics on the West African Examination Council (WAEC) exam
- Pass the entrance examination of the institution
- Pass the interview at the institution

Be able to present:

- Health certificate from a licensed doctor
- Letter of application
- Three years of a high school transcript
- WAEC examination certificate
- Two letters of recommendation
- Two passport size photos
- School fees according to the institution's requirement

National State Board Exams:

At the end of this curriculum, students are eligible to sit at the National State Board Exams to be administered by the Liberian Association of Medical Lab Technicians (LAMLMT) that serves as the regulatory body practice of the EH profession

Philosophy

The philosophical principles that guided the curriculum development process are summarized below:

1. Health is a fundamental human right. The attainment of the highest possible level of health is a most important worldwide social goal.
2. The promotion and protection of the health of the people is essential to the economic and social development of the country.
3. The people have the right and responsibility to participate individually and collectively in the planning and management of their health care services.
4. The Government of Liberia through the Ministry of Health and Social Welfare has adopted PHC as a means of providing basic health care service to the people of Liberia, particularly to those in the rural areas.
5. Inter disciplinary and multidisciplinary team work is important as the basis for a successful organizational structure.
6. Education is a dynamic process. Learning is an active and continuous process enhanced in an atmosphere of trust and mutual respect.
7. Learning will incorporate adult education principles through the inter-active exchange of information and ideas between teachers and students.
8. Communication as a process at all levels is essential to the successful development and implementation of the program.
9. The teaching-learning experience will be culminated through a change in behavior.
10. Lab Techs are responsible for sampling, testing, measuring, recording and analyzing results in the medical lab that help in diagnosing and treating illnesses.
11. The School of MLT through its training programs endeavors to produce health workers with basic scientific knowledge and practical experience to actively Lab Techs perform tests on stool, tissue, blood and body fluids that help in diagnosing and treating illnesses and are responsible for providing all the required technical support to ensure that the lab will function effectively